

### REMARKS

Claims 1-16 are pending. Claims 1, 15 and 16 are amended. Claims 11-14 remain withdrawn from consideration as being directed to a non-elected group.

#### Claim Amendments

Claims 1 and 16 have been amended to recite that the at least one passage [arranged between the compression chamber and the expansion chamber] is formed in a widened portion of the cylinder such that the at least one passage is open in only one predetermined position of the cylinder and the piston relative to one another. Support for this amendment is found, for example, in the specification at page 7, lines 6-10, FIG. 1 and original claim 1. Claims 1 and 16 have further been amended to change the language “first means for transferring gas between said compression chamber and said expansion chamber” to “means for transferring gas between said compression chamber and said expansion chamber.” Claims 1 and 16 have also been amended to change the language “second means” to “pressure source” and to change the language “third means” to “pressure relief mechanism.” Claim 15 has been amended to recite a pressure relief mechanism to conform with the similar amendment to claim 1. These amendments are fully supported by the original specification. No new matter has been added.

#### Claim Rejections- 35 U.S.C. §112

Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 1-9, 15 and 16 as being indefinite under 35 U.S.C. §112, second paragraph, based on the recitation of “second means” and “third means.” The language in question has been amended to recite a “pressure source” and a “pressure relief mechanism,” respectively, in order to clarify the scope of the claim language.

#### Claim Rejections- 35 U.S.C. § 103

Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 1-9, 15 and 16 under 35 U.S.C. §103(a) as being unpatentable over Crouch (U.S. Patent No.

3,259,634), in view of Ingham (U.S. Patent No. 1,151,595) and Tsuchiya et al. (U.S. Patent No. 4,693,454). In Applicant's response mailed June 11, 2005, Applicant argued that none of the references teach a passage that is open only in one predetermined position of the cylinder and the piston relative to one another. The Examiner has asserted that passage "m" of Crouch meets this claim language. Applicant respectfully disagrees.

The passage "m" in Crouch clearly has two spaced apart openings and, as a result, is open at multiple positions of the cylinder and the piston relative to one another. However, in order to further distinguish the claimed subject matter, claims 1 and 16 have been further amended to recite that the at least one passage arranged between the compression chamber and the expansion chamber is "formed in a widened portion of the cylinder such that the at least one passage is open in only one predetermined position of the cylinder and the piston relative to one another." In addition to the cited references failing to teach such a passage that is open only in one predetermined position of the cylinder and the piston relative to one another, none of the cited references teach such a passage wherein the passage is formed in a widened portion of the cylinder. For at least these reasons, claims 1-9, 15 and 16 are not obvious in view of Crouch, Ingham and Tsuchiya et al.

### ***Conclusion***

In view of the above amendment, applicant believes the pending application is in condition for allowance.

If a fee is due, please charge our Deposit Account No. 22-0185, under Order No. 22362-00008-US from which the undersigned is authorized to draw.

Application No. 10/717,916  
Amendment dated  
After Final Office Action of December 6, 2005

Docket No.: 22362-00008-US

Dated:

Respectfully submitted,

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